

ABSTRACT OF THE DISCLOSURE

A user-friendly and statistic based heart rate variability analytical method comprises the following steps of capturing an electrocardiogram signal of a person, performing analog-to-digital conversion of the electrocardiogram signal, selecting the peaks of the electrocardiogram signal, calculating the standard deviation of the heights, durations and inter-peak intervals of the peaks, removing the peaks whose heights, durations or inter-peak duration fall beyond a first predetermined standard deviation, sampling and interpolating the qualified peaks to form a consecutive peak signal, and performing spectrum analysis to the peak signal in frequency domain.